LISTING OF CLAIMS:

1. (previously amended) A method of photodynamic disruption of cellular organisms comprising:

applying a surface acting agent containing benzalkonium chloride at a concentration of between 0.001% to 1.0% to a cell membrane of a cellular organism, said surface acting agent disorienting a cell membrane so that said cell membrane no longer functions as an effective osmotic barrier;

passing a photosensitive material through the disoriented membrane and into the cell interior; and

applying light to the cellular organism to cause a cellular disruption of the cellular organism.

2. (Previously amended) The method of cellular organism disruption of claim 1 wherein the surface acting agent and the photosensitive material are provided in a combined solution.

3. (previously amended) The method of cellular organism disruption of claim 2 wherein the combined solution is provided in proximity to the cellular organism via a topical application.

4. (Previously amended) The method of cellular organism disruption of claim 1 wherein the step of applying the surface acting agent and the step of passing the photosensitive material is performed on cellular organisms located on a surface of a medical prosthesis.

5. (Original) The method of cellular organism disruption of claim 1 wherein the photosensitive material is monomeric, dimeric, or polymeric.

6. (currently amended) The method of cellular organism disruption of claim 1 wherein the cellular organism is associated with ~~one of the following: a sterilization procedure, a biofilm eradication procedure, a treatment of an infection at a tissue site, eradication of cancer cells, and~~ an air filtration/decontamination process.

7. (Original) The method of cellular organism disruption of claim 1 wherein the cellular organism is a microbe, a spore, a fungus, or a cancer cell.

8. (canceled)

9. (Original) The method of cellular organism disruption of claim 1 wherein the surface acting agent contains benzalkonium chloride provided in a concentration range of between 0.005% to 0.05%.

10. (Previously amended) The method of cellular organism disruption of claim 1 wherein the step of applying the surface acting agent precedes the step of passing the photosensitive material by between 1 to 30 minutes.

11. (Previously amended) The method of cellular organism disruption of claim 1 wherein the step of applying light to the cellular organism occurs for a period of between 5 seconds to 1 hour and results in cellular organism death.

12. (Original) The method of cellular organism disruption of claim 1 wherein the step of applying a light includes a light wavelength ranging from 450 nm to 780 nm and a light dosage ranging from 10 J/cm^2 to 100 J/cm^2 and a light dosage rate ranging from 50 mw/cm^2 to 250 mw/cm^2.

13. (Previously amended) The method of cellular organism disruption of claim 1 wherein the step of applying the surface acting agent includes providing more than one of a plurality of different surface acting agents.

14. (Previously amended) The method of cellular organism disruption of claim 13 wherein the step of passing the photosensitive material includes providing more than one of a plurality of different photosensitive materials.

15. (previously amended) A method of photodynamic disruption of organisms comprising:

topically applying a surface acting agent containing benzalkonium chloride at a concentration of between 0.001% to 1.0% to a cell site with an organism, said surface acting agent disorienting a membrane of the organism so that said membrane no longer functions as an effective osmotic barrier;

passing a photosensitive material in association with the organism, said photosensitive material being accumulated within the membrane of the organism; and

applying light to the organism to cause a disruption of the organism.

16. (previously amended) The method of organism disruption of claim 15 wherein the surface acting agent and the photosensitive material are in a combined solution.

17. (canceled)

18. (previously amended) The method of organism disruption of claim 15 wherein the step of applying the surface acting agent and the step of passing the photosensitive material occurs on a surface of a medical prosthesis.

19. (currently amended) The method of organism disruption of claim 15 wherein the organism is associated with ~~one of the following: a sterilization procedure, a biofilm eradication procedure,~~ an air filtration / decontamination device~~, and a treatment of an infection at a tissue site~~.

20. (previously amended) The method of organism disruption of claim 15 wherein the photosensitizing agent is monomeric, dimeric, or polymeric.

21. (canceled)

22. (previously amended) The method of organism disruption of claim 15 wherein the benzalkonium chloride is provided in a concentration range of between 0.005% to 0.5%.

23. (previously amended) The method of organism disruption of claim 15 wherein the step of applying light results in organism destruction.

24. (previously amended) The method of organism disruption of claim 15 wherein the step of applying light occurs for a period of between 5 seconds to 1 hour and results in organism death.

25. (previously amended) The method of organism disruption of claim 24 wherein the step of applying light occurs for a period of between 2 to 20 minutes.

26. (previously amended) The method of acellular disruption of claim 15 wherein the step of applying the surface acting agent precedes the step of providing the photosensitive material by between 1 to 30 minutes.

27. (previously amended) The method of organism disruption of claim 15 wherein the step of applying the surface acting agent includes applying more than one of a plurality of different surface acting agents.

28. (previously amended) The method of organism disruption of claim 15 wherein the step of passing the photosensitive material includes passing more than one of a plurality of different photosensitive materials.

29. (previously amended) The method of organism disruption of claim 15 wherein the step of applying a light includes a light wavelength ranging from 450 nm to 780 nm and a light dosage ranging from 10 J/cm^2 to 100 J/cm^2 and a light dosage rate ranging from 50 mw/cm^2 to 250 mw/cm^2.

30. (previously amended) The method of organism disruption of claim 15 wherein the organism is from a group containing: a virus, a spore, and a plasmid.

31. (previously amended) A method of photodynamic disruption of cells comprising the steps of:

identifying an area of cell activity;

applying a concentration including a combination of a benzalkonium chloride compound at a concentration of between 0.001% to 1.0% and a photosensitive material to the area of cell activity, said benzalkonium chloride compound disorienting a cell membrane so that said membrane no longer functions as an effective osmotic barrier, and so that said photosensitive material is able to pass through the disoriented cell membrane; and

exposing the area of cell activity to light having a light wavelength, a light dosage and a light dosage rate to cause photodynamic cellular disruption.

32. (Previously amended) The method of photodynamic disruption of cells of claim 31 wherein the step of identifying an area of cell activity includes an examination and identification of a cell site on a living body, and the step of applying the concentration includes an application of the concentration to the cell site of the living body.

33. (Original) The method of photodynamic disruption of cells of claim 31 wherein the step of identifying an area of cell activity includes identifying a medical prosthesis or device for sterilization procedure, and the step of providing the concentration includes an application of the concentration to a cell site of the prosthesis.

34. (Original) The method of photodynamic disruption of cells of claim 31 wherein the step of identifying an area of cell activity includes identifying an air filtration/decontamination device, and the step of providing the concentration includes an application of the concentration to a cell site within the device.

35. (canceled)

36. (canceled)

37. (canceled)

38. (canceled)

39. (canceled)

40. (previously amended) A method of photodynamic eradication of organisms within a biofilm of a medical prosthesis, said method comprising the steps of:

applying a photosensitive material and a surfactant to a surface of the prosthesis supporting a biofilm;

allowing the surfactant to disrupt membranes of the organisms within the biofilm;

waiting a period of time until the photosensitive material accumulates within the organisms;

providing a source of light illumination having predetermined light characteristics; and

illuminating the organisms within the biofilm layer with the light source to achieve a photodynamic eradication of organisms within the biofilm layer.

41. (previously amended) The method of claim 40 wherein the surfactant is benzalkonium chloride provided in at a concentration of between 0.001% to 1.0%.

42. (Previously amended) The method of claim 41 wherein the step of applying the photosensitive material and the surfactant is via an impregnation of compounds upon a surface of the prosthesis.

43. (Original) The method of claim 41 wherein the step of illuminating the biofilm layer is achieved by an internal illumination of the prosthesis.

44. (Original) The method of claim 41 wherein the step of illuminating the biofilm layer is achieved by an external light source illuminating the biofilm layer.

45. (Previously amended) A method of photodynamic eradication of organisms within a biofilm layer of an endotracheal tube, said method comprising the steps of:

providing a photosensitive material and a surfactant to a surface of the endotracheal tube supporting a biofilm layer;

accumulating photosensitive material within the organisms comprising the biofilm;

allowing the surfactant to disrupt membranes of the organisms within the biofilm;

waiting a period of time until the photosensitive material accumulates within organisms;

providing a source of light illumination having predetermined light characteristics; and

illuminating the biofilm layer of the endotracheal tube with the light source to achieve a photodynamic eradication of organisms within the biofilm layer.

46. (previously amended) The method of claim 45 wherein the surfactant is benzalkonium chloride provided at a concentration of between 0.001% to 1.0%.

47. (Original) The method of claim 45 wherein the step of providing the photosensitive material and the surfactant is via an impregnation of compounds upon a surface of the endotracheal tube.

48. (Original) The method of claim 45 wherein the step of illuminating the biofilm layer is achieved by an internal illumination of the endotracheal tube.

49. (Previously amended) A method of photodynamic eradication of organisms within a biofilm layer of an intravascular catheter, said method comprising the steps of:

providing a photosensitive material and a surfactant to a surface of the intravascular catheter supporting a biofilm layer;

accumulating photosensitive material within organisms comprising the biofilm;

allowing the surfactant to disrupt membranes of organisms within the biofilm;

waiting a period of time until the photosensitive material accumulates within the membranes of organisms within the biofilm;

providing a source of light illumination having predetermined light characteristics; and

illuminating the biofilm layer of the intravascular catheter with the light source to achieve a photodynamic eradication of organisms within the biofilm layer.

50. (previously amended) The method of claim 49 wherein the surfactant is benzalkonium chloride provided at a concentration of between 0.001% to 1.0%.

51. (Original) The method of claim 49 wherein the step of providing the photosensitive material and the surfactant is via an impregnation of compounds upon a surface of the intravascular catheter.

52. (Original) The method of claim 49 wherein the step of illuminating the biofilm layer is achieved by an internal illumination of the intravascular catheter.